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UTCS ComputerNews

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# Let's Talk About It:

Well, Gentle Reader, I bet you think we have been taking it easy this summer, just waiting for you to return. This is definitely not true! Summer is our busiest time; we take on projects, the number and complexity of which would daunt any reasonable commercial organization. And, by and large, we pull the whole effort off pretty well. I will try to give you some idea of what we are working on now and what is in the works.

Probably the highest profile activity has been the acquisition and installation of the Xerox 8700 laser printer. This was covered in detail in the last issue of *COMPUTERNEWS*. We are financing this piece of gear by eliminating two of our old IBM 1403 central line printers and by projected increased usage.

Another significant project is the installation of a general purpose UNIX service on a VAX-11/750. This machine will replace the PDP-11/70 for nonstatistics users. The CAT and the Varian will be moved from the 11/70 to the 750. The 750 will run Berkeley 4.2 UNIX rather than AT&T, but this change should present only very minor problems to users. The 11/70 will become a totally statistics facility that we will run for the Department of Statistics.

We are installing another VAX-11/750 in the CDF (Computing Disciplines Facilities) at the Engineering Annex, which we run for the department of Computer Science. The CDF will then have a 780 and two 750s. In addition, 25 terminals for the new VAX will be installed on the ground floor of the Annex. The BICS terminals, formerly at the Annex, will be farmed out to our other public sites.

We are installing Ethernet Local Area Networks in the Annex and at Arts & Science, as well as in our central computer room. They will be connected by two fibre optic cables running from the computer room to these sites. About 60 terminals will be connected on this network and will be able to access most of our machines. We are installing these networks in order to avoid expanding our outdated PACX (Private Automatic Computer EXchange), to offer better service and to try out new technology. By freeing up PACX ports, we are able to increase the potential connectivity of a greater number of our terminals as well. The fibre optic cables contain 12 fibres, only one of which we are using. The other, can potentially be used in the future for other purposes.

We are expanding dial-up access to both the BICS machine (IBM 3033/U16) and the CDF by increasing the number of dial-up ports on PACX.

We are working with the Department of Computer Science in installing 12 TI Micro computers at the Robarts Library public site. This facility is a pilot project. It is designed to at least partially offload the BICS services, but even more importantly to study the best way to offer microcomputer based instructional services.

We have substantially expanded our Microcomputer Lab with a number of new machines, and we are in the process of purchasing a broad variety of software packages for your trial and evaluation.

We are working with the English Department in determining the best facilities for teaching their writing courses for professional faculties. These courses will be taught using Writers Workbench under UNIX.

As you can see by this list, which is certainly not exhaustive, we have been working pretty hard, and we are not finished yet. But when we are done, I think you will discover that you have more, better and more flexible facilities available for your use. Many of these projects are covered in this issue. Welcome back!

*Warren Jackson*

# Meet the Imaging/Humanities Support Group

The Imaging/Humanities Support Group (I/HSG) consists of John Bradley (Supervisor), Pat Hood and Vera Petrashkewych (Text Products Specialists), Kin Fong (Graphics Specialist) and Lidio Presutti (Humanities Support Specialist). As the name suggests, the group is responsible for the broad areas of computer output "imaging," and computer processing in humanities. Thus, the group's activities are concerned with using computers to:

- assist in the preparation of documents
- prepare graphics, or view data in a graphical fashion
- assist in a humanities-oriented task.

We try to serve the needs of both novice and experienced users. Some people who wish to use computers in their work find that they need a "leg up" to get started effectively. Others are already using UTCS machines. They may wish to increase their computing effectiveness or find out how to tackle a new problem.

The big news from I/HSG is the Xerox 8700. This laser printer, as well as providing significant new features for existing users, has great potential for the preparation of high-quality text and graphics. The group has already piloted the installation of the 8700 as a line printer replacement. In this mode the 8700 offers higher quality line printer and letter-quality type output at a substantially lower cost. The group is now beginning to investigate whether the 8700 could be used as a highspeed graphics output device, and how it could be used to provide typeset-like output. We will even look at how these two types of output could be combined into a single process so that the 8700 could print a document containing both typeset text and graphics! Watch for developments in this area during the rest of this year and in 1985.

The I/HSG will also continue to enhance its support for microcomputer applications in the 1984-85 year. In particular, we will work with the UTCS Microcomputer Support Group to provide support for people who wish to use microcomputers in advanced, or nonstandard ways. There will also be continued efforts to assist users who wish to share their computing between personal computers and UTCS mainframes.

The humanist who is interested in computing can get special individual assistance from I/HSG. Not only is the group experienced with the text preparation issues unique to humanists; it also supports tools for humanities-oriented text analysis. For more information about Humanities support please see "Humanities News" elsewhere in this issue.

*John Bradley*

# The Statistical and Numerical Analysis Computing (SNAC) Group

In February 1984, the Statistics and Numerical Analysis Computing (SNAC) Support Group was established at UTCS. The staff assigned to this group are Bill Fehlner, supervisor, and Diane Mitchell and John Roth, product specialists. This article outlines the objectives which the SNAC group has set for itself, some of its activities over the past six months, and some key tasks for the next few months.

There are four major objectives for SNAC, all of which are interrelated and promote an environment in which the user can select effective software and utilize it efficiently. The first objective is to ensure that UTCS is a reliable and accessible source of accurate information on statistics and numerical analysis computing. The second is to help users be self sufficient for the majority of their computing needs. A third objective is to develop our product base to provide Class A support to a maximum number of users. The final objective is to manage the product base to minimize programmer time in this area while keeping the product base current.

To reach the first objective, we plan to enhance both the information itself and the means for accessing it. For example, Diane Mitchell has been developing tools and documentation to assist users in accessing the Canadian Census tapes. This project has been described in previous issues of *COMPUTERNEWS,* and the "UTCS Guide to Census Tapes" will be published soon. John Roth is in the first stages of a project to review the mix of statistical and numerical analysis software now available at UTCS. A first edition of the "UTCS Catalogue: Numerical Products" was released in the spring and it will be updated this fall. As well, we will produce the "UTCS Catalogue: Statistical Products" during the fall.

In developing the product base, we require a mix of products covering a wide range of applications. These products must be able to talk to each other, must still be evolving and must have active vendor support. SPSS is definitely one of these products and it is now being introduced for microcomputers. A copy of SPSS-PC has been acquired and installed on the IBM/XT in the UTCS micro lab. We are currently running benchmarks on this product and testing it to determine its compatibility with SPSS-X on the IBM 3033/N12. A SAS procedure is now available to move data from SPSS-X system files to SAS datasets and a procedure to move data in the other direction will be available soon.

A Batch version of the statistical package MINITAB has been available for several years but has been little used. The status of MINITAB will change this fall. The SNAC group is assisting in a pilot project to use MINITAB for undergraduate instruction in introductory statistics. An interactive version of the package has been installed under VM/CMS and will be used by the Department of Statistics for its introductory courses this fall.

The SNAC group is currently revising the short courses on SAS which are offered by UTCS. We are also working with the Central Advising Office to develop a TSO course for new users which will integrate with the SAS course. The changes are intended to smooth the path for new users who want to take advantage of the computing resources available through UTCS.

SNAC has the potential for improving computing for a significant number of users. How and when it reaches that potential is partially dependent on user response. The Statistical Computing Users Group provides one forum where interested users can play an active role in setting directions for the SNAC group. As well, I and other members of the SNAC group would like to hear from individuals directly.

*Bill Fehlner*

# The Microcomputer Support Group (MSG)

New and returning students and faculty should know about some interesting developments on campus over the summer:

- Since June, there has been a University-wide Microcomputer Discount Plan in effect. Some of the best prices in the city are being offered for a variety of micro hardware and software. Microcomputers, including IBM PCs, a number of PC-compatibles, Apples, Macintoshes, and more, are available for purchase by U of T faculty, staff, and students. Most of the machines are being sold at the Textbook Store and Computer Shop (formerly known as the "Textbook Store") where they are available in a demonstration area.

- In response to the growing number of micro users, UTCS has established the UTCS Microcomputer Support Group, consisting of Paul Roth (Supervisor), Willard McCarty, and Greg Stopelli. The Micro Lab has been expanded, and a number of the machines in the Discount Plan have been added.

In terms of computer use on campus, this indicates that more and more people are seeking microcomputer solutions to problems. Demand for professional advice on the selection, use, and maintenance of microcomputers and associated software and peripherals has grown enormously. As well, the ability to transfer information between mainframes and micros, and to use a micro as a terminal signed on to a mainframe, bulletin board, or network, have become common criteria when considering a micro purchase.

These developments have in a large part defined the mandate of the Micro Support Group. As explained in the last issue of *COMPUTERNEWS*, our main responsibilities include consulting/advising, documentation, and education. A preliminary analysis of our activities over the summer demonstrates this. Discounting administrative duties, the MSG have divided their time this way:

| | |
|---|---|
| Consulting/Advising: | 44 % |
| Investigation & Research: | 33 % |
| Documentation: | 13 % |
| Education: | 3 % |
| Maintenance & Installations: | 7 % |

Looked at by topic:

| | |
|---|---|
| Selection/Concepts: | 44 % |
| Processors & Peripherals: | 15 % |
| Software: | 28 % |
| File Transfer/Communications: | 13 % |

We anticipate an increasing demand for education beginning in September. Two seminars are currently being offered: "Micro-to-Mainframe Transfer," and "Care and Feeding of your Microcomputer." Please call Irene Rosiecki at 978-4565 for schedule information, or look for our posters at the Textbook Store and other campus locations.

We encourage you to take advantage of our services: please phone us at 978-5071 or 978-4597 for advice or to arrange for an individual appointment. We look forward to hearing from you.

*Paul Roth*

## Welcome Back to UNIX at UTCS

Welcome back to UNIX users! We hope that you who escaped for the summer had an enjoyable time. We have made some changes over the summer, and this seems like a good place to review them.

In order to expand our service, users of the SAS/DPS PDP-11/70 service have been divided into two groups. Statistics users will continue to use the PDP-11/70, while all others use a VAX-11/750. The new VAX will be operated by UTCS as a UNIX timesharing service to all interested parties on campus.

The new system runs the 4.2BSD version of UNIX, a powerful timesharing operating system. This version of UNIX is similar to the Seventh Edition UNIX familiar to SAS/DPS users. In addition it offers new commands and new features. It will be connected to the UTCS campus network so that users can transfer files to a wide range of machines. A document detailing the conversion process is presently online on both machines.

Most text users will see little difference; users with their own programs in a language such as C or FORTRAN-77, will have to recompile their programs for the new machine. All accounts and files belonging to non-statistics users will be transferred. The same PACX class which got you onto the SAS/DPS machine will now get you the GP UNIX service.

The UTCS GP UNIX timesharing facility, as we are calling it, consists of a VAX-11/750 with two disk drives, one tape drive, five megabytes of memory, and terminal lines. Terminal access will be available through both PACX and the new Terminal Server Network. (See ''Terminal Server Network at EAT & AST Sites'' elsewhere in this issue.)

Anyone with an application based on or suitable for use on UNIX is invited to discuss with UTCS the possibility of using this new service. Please call Advising Services, 978-HELP.

We think that GP UNIX will be a major step forward for UTCS and look forward to helping you use UNIX to make your computing easier.

*Ian Darwin*

## 978-HELP

Those of you just returning from a summer away from computing will notice some changes in the Central Advising Office (CAO).

Alex Nishri has been promoted to Supervisor of Applications Support and Advising, and Terry Jones has become Supervisor of the CAO. I am confident that this arrangement will offer a very high degree of technical support for all your computing needs.

Walk-in advising service is still available at the Engineering Annex Terminal. However, the Arts and Science site has been consolidated with the Central Advising Office. With this consolidation we can now offer a special statistical and numerical advising line with full support from the Statistical Numerical Analysis Computing group. Through this new service, which starts later in September, the SNAC product specialists will be available to deal specifically with statistical and numerical queries. The phone number for the new service is 978-STAT.

Service on the 978-HELP lines will contin-

continued...

**978-HELP** continued

ue at the same level, and the consultants (Veronica Moravan, Jonathan Alexander, and Terry Jones) are still available by appointment for questions that cannot be handled by phone.

We hope the problems you encounter in the coming academic year are few, but if you do need HELP, it is just a call away.

*Don Gibson*

## Accounting Services

The Accounting Services Office, located in McLennan Laboratories, Room 337, handles setup, changes and deletion of accounts and access codes. This group also answers inquiries about the status of accounts and in general assists customers with accounting problems or concerns. Accounting Services hours are 9:00 a.m. to 5:00 p.m., Monday through Friday.

Customers who plan to use university funds for computing and who are not familiar with university or UTCS accounting systems and procedures, should refer to the UTCS Guide to Products and Services: Accounting, available from the Accounting Services Office and the Information Office (Engineering Annex, Room 206). Customers planning to use external funding should contact the UTCS Marketing Consultant at 978-6875.

Existing university customers should note the following changes which became effective May 1, 1984.

Computing funds are now "monetized" which means they are hard funds and can be used to purchase computer products and services from *any* supplier. For this fiscal year, however, they cannot be used to cover noncomputing expenses. We have revised our rates as a result of our costing study. The total funds distributed by the Office of the Vice-President, Research and Government Relations, is less than it was last year in reflection of our revised rates. The funds to cover teaching, administrative activity, and subsidization of research grants have been set up in Operating Appropriation Account 1-NNN-NNN-90. The old subsidy account with minor code 98 is no longer used.

Funding of accounts is done by raising an Encumbrance Memo, a blanket purchase order for use within the university. This form, as well as the Encumbrance Memo Change form, is available from the Purchasing Department, 7th Floor, 215 Huron St., 978-2353. The order form for these forms includes instructions on their use.

Since funding is now completely in hard dollars, all UTCS services can be charged to a Customer Account Number (CAN), including special services previously billed via a Debit Memo.

Overdrawn accounts are no longer allowed a 10-day grace period to arrange additional funding, nor are Overdrawn Account letters being mailed to account holders. This procedure has been replaced by an Account Balance letter sent to alert the account holder when the remaining balance reaches 20% of the account's total allocation. If additional allocation is not made, the account is locked on the first day it shows a negative (overdrawn) balance.

The Service Access Code (SAC) on the IBM 3033/N12 machine has also undergone some changes. The SAC balance, derived from the dollar limit set by the CAN holder, now reflects all charges for services on a daily basis: Batch, TSO, WYLBUR, and Online Storage. Class C is no longer an option since the service has been discontinued.

As mentioned, rates on virtually all services have changed and, in some cases, so has the method of charging. New services,

continued...

**Accounting Services** continued

such as Xerox 8700 output and General Purpose UNIX, have been added with improved quality at lower cost. The new rate schedule is available from the Accounting Services Office.

*Marg Doherty*

## Protect Your Codes

Users should take the following precautions to ensure optimal security for their Service Access Codes (SACs).

- Think of your SAC and password as a credit card or blank cheque - **Don't Lose It.**
- **Do Not Imbed Job Statements** in datasets.
- **Obscure the Password** at the start of your terminal session.
- **Avoid Shared SACs** by establishing a separate SAC for each user.
- Instruct the Accounting Services Office to **Lock Your SAC** if you do not plan to use it for a period of time.
- **Set Expiry Dates** for SACs of limited duration.
- **Watch the Balance or Accumulated Usage** to determine whether unauthorized activity is taking place on your SAC.
- **Request a Spending Limit** on the SAC.
- **Report Suspected Misuse Immediately** to the Accounting Services Office.

*Marg Doherty*

## Scarborough College Site

Several changes took place this summer at the computer center at Scarborough College. Scarborough entered the "era of networking" very much in line with all networking developments elsewhere at U of T. It will provide the college, students and researchers with greater flexibility in their computing. At the request of Scarborough, we have replaced the VMS and LIBRA systems with a UNIX system which will be running on both of the VAX-11/750s. In addition, it will run on Spectrix 30, the college's new "supermicro," which is primarily used for word processing. This system replaces the old "dial-up" word processing stations at each division. With the new network, we are also replacing all dial-up public terminals with terminals hardwired to PACX at 1200 baud. The network has also replaced all seven CDF UNIX terminals and eliminated the need for reserved "Scarborough terminals" downtown.

Here is a summary of the hardware and services now at the centre:

- Local UNIX services - 50 terminals shared by two VAX-11/750 systems. Files may be transferred from several other UNIX systems at U of T locations connected to the network.
- RJE to the IBM system will be provided on both UNIX systems, although some restrictions might be implemented initially.
- The cardreader service is no longer available; those requiring this service must use the cardreader downtown, in the Engineering Annex, Room 104.

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**Scarborough College** continued

The operator and advising have moved to Room S626A. This move allows the printer room (S624) to be open 24 hrs/ 7 days a week.

The computer centre supports all courses involving computing as well as other academic and administrative computing at the college. It provides access to all computing services offered by UTCS.

The normal hours of operation at the centre are published under "UTCS Terminal and Advising Sites" in each issue of *COMPUTERNEWS.*

Any changes to these hours will be braodcast on the systems in advance.

If you have any questions regarding the new equipment, and services, or if you have computing problems, please feel free to drop by Room S626 or call me at 284-3173.

*William Barek*

## Erindale College Site

To serve its research and instructional needs, Erindale College has on site a VAX-11/780 running VMS, and a VAX-11/750 running UNIX. The latter is used primarily by students enrolled in Department of Computer Science courses. Thirty-two UNIX terminals, with 24 hour access, are located in the South Building, Room 2045.

The VMS system partially serves the instructional needs of Psychology, Earth and Planetary Science, Survey Science, and English. Eight terminals are available on a 24 hour basis also in Room 2045. There are 8 more terminals in the North Building, Room 235, for use during normal business hours.

Last year saw the introduction of computing for Humanities students; this year all English students will be required to produce their papers with the aid of SCRIBE, EDT, and Writers Workbench.

The VAX-11/780 running VMS serves both research and instructional needs. Researchers are charged for usage and have available to them: SCRIBE, SAS, FORTRAN-77, Pascal(Eunice), C, Topos(Graphics), Writers Workbench, and KERMIT.

This year we are introducing networking to the college. All public terminal sites will have access to UTCS' St. George facilities as well as to our local machines.

*Peter Wall*

## UTCS Terminal Server Network at the EAT & AST Sites

Many users have probably experienced the frustration of queuing for a PACX line. Now, to ease some of the pressure on PACX, certain terminals in the Engineering Annex Terminal (EAT) site and the Arts & Science Terminal (AST) site are using the Terminal Server Network to connect to the UTCS computers. All of the terminals in EAT 103 and 104, and all but the IBM 3278s in AST 2104 and 2105 are affected.

Like PACX the Terminal Server provides a switched interface between users' terminals and UTCS' services. The network uses Network Terminal Servers (NTS), small dedicated microcomputers which communicate over a fibre-optics based Ethernet network.

continued...

**Terminal Server Network** continued

To use the Terminal Server Network service all you have to do is:

1. Get the attention of the Terminal Server, by turning a terminal on, and wait for a "nts1:" prompt. This should appear immediately. If not, press RETURN.
2. Make a request to connect to the selected service (see the list of names below) by typing:

```
campon <service>
```

and pressing, RETURN once.

A message of the form

```
Connected to 7.001c31
```

is then printed on the terminal, where "7.001c31" is the remote port's address. Hitting RETURN once or twice will cause the computer to respond with its usual login sequence.

For a more detailed description of this service, see the short document, "UTCS Terminal Server Network." It is posted at both the EAT and AST sites and may be obtained from the Information Office.

**Valid service names are:**

| | |
|---|---|
| DEC10 | - DEC1090 computer running TOPS-10 |
| GPUNIX | - a general purpose UNIX timesharing service |
| IBMA | - IBM computer for use with line-mode TSO, WYLBUR, and APL at 300 baud |
| IBMAF | - IBM computer for use with line-mode TSO, WYLBUR, and APL at 1200 baud |
| IBMAFS | - IBM computer for use with fullscreen TSO and WYLBUR at 4800 baud |

Terminals connected to the Terminal Server Network operate at a fixed speed (baud rate). XT-100s operate at 4800 baud, Volker Craig VC303s at 1200 baud. Hardcopy terminals (such as Decwriters and Diablos) operate at 300 baud. These terminals should be left at the correct speed regardless of the system you intend to use.

XT-100s operating at 4800 baud may access all services. Volker-Craig VC303s may access all services except for IBMAFS. Hardcopy terminals operating at 300 baud may access DEC10, GPUNIX, and IBMA only.

If you have any questions or problems, please see the Site Coordinators for assistance. Site Coordinators are available, Monday through Friday from 9:00 a.m. to 5:00 p.m.

*Krys Warchol*

## OUCC 1984

The 15th Ontario Universities Computing Conference was held at Lakehead University, Thunder Bay on June 4 - 6; five UTCS staff members attended.

The Keynote Speaker was Dr. John McCredie, President of EDUCOM. His presentation described current efforts to provide smooth gateways among ARPAnet, BITNET, CSNET, and MAILNET. It also suggested how universities or colleges should decide which of these networks to join.

Papers at the five sessions were presented by vendors, computer center personnel from various universities and university users sharing their experiences. UTCS

continued...

**OUCC 1984** continued

Director Warren Jackson chaired the Applications session, and Norman Housley, Manager of Communications and Technical Support, contributed a paper describing the wide range of network products and services available, as well as the current networking activities at U of T. During the panel discussion, it was acknowledged that U of T's highly complex networking process is largely due to the size of the St. George campus.

Representatives responsible for inter-university networking (previously known as OUNET) also met during the conference. Among other improvements/suggestions, they devised the new name NetNorth. There are currently nine mainframe university computers connected to NetNorth. For more information, please refer to "Announcing NetNorth" in the July/August issue of *COMPUTERNEWS.*

Dr. Charles Nunally presented one of the most interesting papers, entitled "Personal Computers for Freshmen - Pros and Cons." Dr. Nunally is Assistant Dean for Engineering Computing, Virginia Polytechnic Institute and State University, where all freshmen in Electrical Engineering (about 1200 of them) had to purchase a personal computer before they were accepted for the fall '84 semester. Students chose from four micros, selected by an evaluation team, with the second cheapest recommended for student purchase. Surprisingly, the majority of students opted to purchase a more expensive model than that recommended. There are plans to equip the residences with printing facilities. In addition, there will be two micro labs with full time operator coverage and consultants on hand at designated times.

Some of the other topics covered were "Upgrading Computer Literacy," home computers in the present and future, "Computer Aided Instruction," "Microcomputers and Communication," public access information, academic library computing, integrated document handling in a university community, and CAD/CAM applications.

The 16th OUCC will be hosted next year by Ryerson Polytechnical Institute. The theme is "In Search of the Ideal Academic Computing Center"; the objective will be to define the purpose of such a center and to determine the ideal design for it. Anyone with some innovative ideas for a computer center is invited to submit a paper. Only original and unpublished papers are permitted, and two camera ready copies are required. Papers must not exceed ten typed pages, single spaced, and must conform to "The Author's Typing Style Guide." They may be submitted to:

**John Johnston, Program Chairman**
**16th OUCC**
**Ryerson Polytechnical Institute**
**350 Victoria Street**
**Toronto, Ontario M5B 2K3**

The deadline is January 14, 1985.

Proceedings of the 15th OUCC will be available at the Information Office, Room 206, Engineering Annex.

# Toronto DECUS '84

The 1984 DECUS Canada Symposium (April 30 - May 3) was, in my opinion, the best ever. Much of the credit should go to the University of Toronto personnel who helped organize the conference.

For example, the VAX/VMS interest stream was the responsibility of Anna Pezacki of the Department of Physics. It accounted for about one third of all sessions, nearly forming a separate minisymposium in itself. On one occasion four VAX related sessions were in progress simultaneously.

Several UTCS staff members were also deeply involved with the conference. The UNIX stream was set up by Ian Darwin. Corot Reason organized the Distributed Processing sessions. And John Bradley helped put out the various publications.

As usual, the operating system interest streams had their traditional product panels and system updates. For example, the DEC-10/20 world continued to mull over DEC's Integration Plan for Large Systems. The VAX world seemed excited about Digital's new high and low end hardware announcements as well as VMS version 4.0 (which supports VAX clusters). Of course, the latest developments in the RSTS, RSX and RT worlds were thoroughly discussed. And UNIX people are still trying to figure out where DEC fits into their environment.

In addition there were a number of sessions on such interesting topics as networks (with special emphasis on Ethernet), office automation (VIA, ALL-IN-1) and personal computers (especially the PRO 350).

One of the innovations introduced at this symposium was the two-day series of 16 videotape sessions. These seminars were originally produced by Digital's Central Engineering group for purposes of inhouse training. Due to manpower constraints, the highly technical topics covered by these videotapes could not otherwise have been presented at the symposium.

The special Management stream organized by Digital seemed to be very successful. The full day's program was designed to be of specific interest to those who manage computer systems. It gave DEC customers a chance to meet with Digital Canada's marketing managers and learn where DEC is headed in the future.

Organizing a DECUS symposium is not easy. Every member of the organizing committee did a terrific job and I want to take this opportunity to thank them for a job well done. They made my job as chairman a snap.

The '85 symposium will be held February 19-22 at the brand new CN Hotel in downtown Toronto. Will it be the best ever? You bet! Start making your plans to attend right now.

*Dr. Edmund West*

# Spring '84 DECUS

About 5000 people attended the Spring '84 DECUS Conference in Cincinnati, June 4-8. In lieu of a debriefing, a detailed account is available online (doc:decus.doc). The present article will give only the highlights.

Version 7.02 of TOPS-10 is now in the field (see article in last issue of *COMPUTER-NEWS).* Version 7.03 was also demonstrated. This release is about a year away and will support DECnet over Ethernet.

The University of Western Ontario was very concerned about the status of PULSAR (the tape processing module of GALAXY). They have found the version UTCS is currently running to be deficient in many ways. They are now satisfied with a post-7.02 version, which UTCS plans to acquire in the near future. This should fix most or all of the problems we have experienced with labeled tapes.

The demonstration area housed an impressive Ethernet network including a great variety of machines. Although relatively few sites are using Ethernet, some performance data is beginning to come in.

MicroVAXs were very much in evidence, running both microVMS and ULTRIX (DEC's version of UNIX). For details, see the online debriefing document.

ULTRIX is now available to customers. Digital's commitment to ULTRIX is impressive: it is now on the same footing as VMS in some of the literature. ULTRIX will have the same kind of software support as VMS.

VMS Version 4.0 is now in its second beta test stage. This means that it is eight to ten months away, in Canada. The problems holding 4.0 back apply only to clustered environments. This has allowed microVMS to be released, since microVAXs cannot take part in a cluster. Some previously announced functionality has been removed.

The Version 4.0 print symbiont appears to have all the functionality required for commercial shops, including support for laser printer interfile and interjob setups. The symbiont has been designed to be modified by users. The symbiont jobcontroller interface is also documented, which allows entirely user-written symbionts.

In one session, DEC responded to the top 10 VMS SIRs (System Improvement Requests). Some of these are:

1. Add "structured" syntax to DCL. Response: highest priority in the next DCL update. Not in Version 4.0.
2. Make DCL faster. Response: Version 4.0 makes GOTO's faster. Most of the "speed" of DCL is dependent on the speed of image activation.
3. Make image activation faster. Response: In 4.0, the speed is increased somewhat.
4. Improve EDT and make it customer-modifiable. Response: A point release of Version 4.0 will include a completely new editor which will be supported as a layered product. It will eventually support non-DEC terminal types.
5. Provide a way to deallocate devices held by another process. Response: Noted. Apparently there is a DECUS entry called DEALLOC which does this as long as no I/O is in progress.
6. Provide for character set translation when dealing with foreign tapes. Response: Noted.

There will be at least two point releases of VMS prior to Version 4.0. Version 3.6 is now available.

The next U.S. DECUS will be held in December 1984 in Anaheim, California.

*Corot Reason*

## Humanities News

Under the direction of the Natural Language Processing Steering Committee (NLPSC), Humanities computing support is offered through the Humanities computing office at UTCS. Lidio Presutti serves as full time programmer and is available to both individual and team projects using Humanities computing. He can be reached at 978-5130.

Humanists requiring more than casual consultation must have the approval of the committee. To arrange this, you should first discuss the project with me and then write me a letter outlining the project needs, with a copy to the NLPSC chairman. The letter, along with my time estimate for the project, will be passed to the committee for a decision. Whenever possible, users will be referred to other faculties, research projects, or UTCS short courses which cover the areas of their concern.

Although there is no **real** charge, the aid from this service should be registered as a contribution from U of T to the project; it should also be acknowledged as an internal research grant when applying for grant money from other sources. (Calculate $50 per hour, NLPSC's estimate based on rates for commercial consultants and programmers.)

Since June 1, 1983, a number of projects requesting aid have already been approved and received assistance. Some of these are the Leibniz Lexicon, Nicot Concordance, Records of Early English Drama, Bibliography of Philosophy in Canada and DEEDS. In addition, casual consultations have been given to faculty from the departments of English, French, Classics, Philosophy, Italian, History, Medieval Studies, Library Science and others.

NLPSC meetings are open, and minutes from these meetings are publicly available. If you are not on the Humanities mailing list and would like to receive a copy of the minutes, send your name and address to Lidio Presutti, McLennan Physical Laboratories, Room 217, or call me at the number above.

Current members of NLPSC are:

| | |
|---|---|
| Prof. I. Lancashire | English, Chairman |
| Mr. J. Bradley | UTCS |
| Prof. J.C. Hurd | Classics |
| Prof. A. Mendelzon | CSRG |
| Mr. L. Presutti | UTCS |
| Prof. A.H. Schabas | FLIS |
| Dr. E.V. Swenson | Office of Vice President,<br>Research and Government Relations |
| Prof. T.R. Wooldridge | French |

*Lidio Presutti*

## New SCRIBE Manual

The new SCRIBE user manual is now available from the UTCS Information Office (Engineering Annex, Room 206). This manual reflects the changes in Version 4 of SCRIBE (which should be available sometime in the fall of this year.)

The new manual is different in appearance, and the title is now the *SCRIBE Document Production System User Manual.* The major changes worth noting, however, are the new Mathematical Output facility, the extended hyphenation, and the increased bibliographic formats.

The Mathematical Output facility is dependent upon the printing device's ability to print the required mathematical symbols. It is expected that this will be available on the 8700 when the IBM version of SCRIBE and

continued...

**SCRIBE Manual** continued

the SCRIBE driver for the 8700 are obtained by UTCS. We are not sure if the mathematical output facility will be available for other output devices.

The hyphenation abilities of SCRIBE have been expanded to include hyphenation by dictionary, by algorithm, or by a combination of the two. The chapter on hyphenation is thorough and easy to follow. Users should be able to handle this complex material fairly easily.

Quite a few extensions have been made in the number of bibliographical formats (there are now 21 instead of 10). Better explanations are given for the various formats, and the appendix dealing with bibliography formats has been expanded.

In addition to these new features, there are many new document and device types, environments, and commands. Multiple columns and overprinting have finally been discussed in this manual. Most of the text and examples of other SCRIBE material remain the same, however. There has been very little reorganization in the opening chapters. The advanced material has received the most attention. For users wishing to learn the basics of SCRIBE, the old manual will continue to be sufficient. For manipulating hyphenation, preparing bibliographic databases, and using the new Mathematical Output facility, the new manual is required reading.

*Patricia Hood*

# The 8700 Laser Printer

On September 17, 1984, UTCS will bring into production the XEROX 8700 Laser Printer. The 8700 is, in part, a replacement for conventional printers at UTCS; it is also an extension of UTCS printing capabilities. The 8700 replaces two IBM 1403 lineprinters, and becomes the CENTRAL destination. A 1403 lineprinter will be available only at destination IBM1403.

The User Test for the 8700 will continue through September 16, 1984. During the test period, users must code destination X8700 in order to have their output printed on the laser printer. Following the User Test, the destination for 8700 output will be CENTRAL or ITS.

The 8700 laser printer produces high quality images of near letter-quality. Output requiring high contrast, even quality printing will be produced best on the 8700. Final copies of theses, reports, manuscripts, or course notes are ideally printed on the 8700 because of both the quality of the printing and the convenience of the collated output. Three-hole paper is also available. Exams, course assignments, or letters for mass mailings are other examples of documents which could be printed on the 8700. Printing is less expensive than on the line printer, while offering a greater variety of output styles, types and fonts. The 8700 is also able to do forms merging (printing user designed forms), eliminating the need for preprinted forms.

Complete details about 8700 Laser Printing can be found in the UTCS Guide to Highspeed Printing available at the Information Office. Users should also see the July/August issue of *COMPUTERNEWS.*

*Patricia Hood*

## Changes for Special Forms Users

Users who have traditionally printed on special forms at destination CENTRAL are required to change either their printing destination or their forms design because of the new 8700 laser printer. The 8700 becomes destination CENTRAL on September 17, 1984. At that time, you will have to change your output route to destination IBM1403 in order to print on a line printer.

Some line printer special forms have equivalents on the 8700. Thesis paper (9.5" x 11") on the line printer is available on the 8700 as portrait 1-up 8.5" x 11" with margins from 0 to 1.5 inches. With the 8700, there are the advantages of significantly lower cost, higher quality images, two sided printing, collated copies, and cut sheet paper which eliminates bursting required with line printed forms. One-part blank and 1-part reversed forms, in both 11" x 15" and 8.5" x 11", also have equivalents on the 8700. The same amount of printing can be done on landscape 1-up 8700 forms as on 11" x 15" line printer forms. No change in the setup of the 8700 is required. Printing can also be two-sided. 8.5" x 11" reversed line printer forms have the same equivalent on the 8700 as thesis paper: portrait 1-up 8.5" x 11". Multipart forms with carbons, and labels, can be printed only on the destination IBM1403 line printer after September 16.

Users of special forms should contact UTCS Operations about equivalent forms on the 8700 or about redesigning special forms for printing on the 8700. These changes are required after September 16, 1984.

*Patricia Hood*

## 8700 User Seminar

If there is sufficient interest, UTCS will present a September seminar on the use of the XEROX 8700 Laser Printer. This seminar is scheduled for September 24 at 11:00 a.m. and will be held in the Education Facility, McLennan Labs, Room 221. Presentations on the capabilities and use of the laser printer will be given, and sample output featuring the various fonts and profiles will be available. Anyone interested in this seminar is asked to register with Irene Rosiecki at 978-4565. If sufficient interest is not expressed, the seminar will not be held. For more information about 8700 laser printing, contact Pat Hood at 978-4548.

Plan to attend the 8700 User Seminar. Come and see what 8700 laser printing can do for you.

*Patricia Hood*

# Where Do Toronto's Wealthy Live?

For flexibility and speed, the census tapes are an extremely valuable resource for researchers from every discipline. The Canadian census is much more than just a head count — questions are also asked about incomes, housing, the work force and cultural characteristics. You can find out how many bathrooms the average Canadian dwelling has, how old the average immigrant was when he arrived, or whether rural areas have larger families than cities do, just by writing a simple program to access the data as it is stored on the tapes.

Suppose you owned a chain of fashionable boutiques, and were trying to decide on the best location for your first store in Toronto. Maybe you were doing a survey on political attitudes which you felt might be affected by a person's income level. Or perhaps you were interested in determining how clustered the upper echelons were to try to explain why these areas had developed as they had. All of these decisions require some basic information about where the wealthiest Torontonians live. This data might be obtained from many sources, after a lot of searching. However, I was able to get a simple answer in only thirty minutes - using the University's collection of 1981 Census Tapes.

| AREA | INCOME |
|---|---|
| The Bridle Path area | $49,016 |
| Harbour Castle | $48,535 |
| Forest Hill | $36,391 |
| Yonge, Eglinton, Bayview & St. Clair | $30,272 |
| Rosedale | $30,197 |
| Yonge, York Mills Rd., Bayview & Lawrence | $29,508 |
| The Annex | $28,567 |
| Humber Valley Village | $27,906 |
| Rosedale (a different section) | $26,395 |
| Kipling, Eglinton, Islington & Rathburn | $26,266 |

In addition to a large selection of the available 1981 census tapes, UTCS has tapes from 1971 and 1976, which allow users to do some comparisons over time. As well, other useful supporting tools, such as map data, postal codes, and land areas, are also available.

The "UTCS Guide to Census Tapes" is in the final stages of preparation, and will be available to users in September. It will contain sample programs with explanations, and detailed information on how to obtain a complete list of tape numbers. Any user interested in learning more about census tapes is encouraged to phone Diane Mitchell at 978-5128.

Another source of data from Statistics Canada is the set of time series in the CANSIM University Base Service. The Institute for Policy Analysis has recently purchased this service and is making it available to all university researchers. This service is described in the next article.

*Diane Mitchell*

## CANSIM Data and Retrieval Programs

CANSIM (Canadian Socio-Economic Information Matrix) is a large body of data prepared by Statistics Canada in machine-readable form. The entire system consists of over one-half million time series covering a wide range of social and economic activity; it includes not only data collected by Statistics Canada, but also data developed by other federal and provincial government bodies.

Recently, Statistics Canada has established the "University Base" service. Each year, a tape containing almost 20,000 of the most commonly selected time series is provided and updated quarterly.

There are at least two advantages to retrieving data from CANSIM. First, all of the data are obtained in one common format. Second, unlike dated publications, CANSIM will reflect all later updates and revisions.

The Institute for Policy Analysis has purchased the University Base service and makes it available to all university researchers. Since the University Base comes with no supporting software of its own, the Institute has developed a number of programs facilitating use of the data tape.These programs operate on the IBM mainframe via WYLBUR, but the Institute will be pleased to cooperate with anyone wishing to adapt the software for other U of T systems, such as TSO or APL.

Briefly, the major program permits individual series to be extracted from the University Base and output in one of three forms:

- To a special "bank" on disk for later rapid access
- As a card-image set of LOAD entries for TSP (Time Series Processor)
- As a card-image DATA block for SAS

Auxiliary programs extract data on disk banks for use by TSP and SAS. Documentation for the major and auxiliary programs is available online in WYLBUR. For more information on CANSIM and the University Base or on the program documentation, log on to WYLBUR and enter:

```
use $u07710.lib#docansim
```

Researchers interested in CANSIM data should be aware that data from the 1971, 1976 and 1981 Canadian Census is available to users who have a General Purpose Job Stream access code. Just as with the CANSIM University Base service, these Census tapes came without supporting software. The "UTCS Guide to Census Tapes" has been written to assist users in accessing census data; it will be available in September.

*Peter Dungan*

## How to Convert SPSSX System Files to SAS® Data Sets

SPSS-X system files are substantially different from old SPSS system files and can not be read by SAS's PROC CONVERT. To alleviate this problem, UTCS has obtained a SAS program, SPSSXSAS, which will read an SPSS-X system file and convert it to a SAS data set, performing all of the functions of PROC CONVERT, in addition to converting value labels. To run SPSSXSAS, and create a temporary SAS data set and format library, you must use the following JCL:

```
// EXEC SAS,REGION=750K
//SPSSXSAS DD DISP=SHR,
// DSN=APPL.STAT.SAS824.SAMPLE(SPSSXSAS)
```

continued...

## SPSSX to SAS continued

```
//SPSSXDD DD DSN=...your SPSSX system file...,DISP=SHR
//SASCC002 DD UNIT=SYSDA,SPACE=(8000,(1,1))
//SASCC003 DD UNIT=SYSDA,SPACE=(8000,(1,1))
//SASCC004 DD UNIT=SYSDA,SPACE=(8000,(1,1))
//SASCC169 DD UNIT=SYSDA,SPACE=(8000,(1,1))
//SASCCBUF DD UNIT=SYSDA,SPACE=(8000,(1,1))
//SYSIN DD *
%INCLUDE SPSSXSAS;
  :
 regular SAS statements to process the new data set go here
  :
/*
//
```

Depending on exactly what your SPSSX system file is like, and what you want to do in SAS, you may wish to add some more JCL statements. If a DD statement named SASLIB is added after // EXEC SAS, the SAS formats that result from the conversion of SPSS-X value labels will be saved. For more information on permanent SAS format libraries, see page 746 in the *SAS User's Guide: Basics.* Another DD statement should be added before //SYSIN DD * if you want your SAS data set to be stored in a SAS data library. In this case, another SAS statement is necessary: a SAS macro called SASNAME containing the name of the SAS data set to be output. For example, if your SAS data library was called U05104.RABBITS.SASLIB, and the data set was named DUTCH, then your DD statement might be:

```
//BUNNY DD DSN=U05104.RABBITS.SASLIB,DISP=SHR
```

and the SAS statements would be:

```
MACRO SASNAME BUNNY.DUTCH %
%INCLUDE SPSSXSAS;
```

SPSS-X system missing values are converted to the SAS missing value, a period. SPSS-X numeric blanks, however, are converted to the SAS special numeric missing value ".B". The default option for handling SPSS-X user-defined missing values is to include them in the history section of the new SAS data set, and not to convert them to SAS missing values. Failure to take into account the fact that SPSS-X user-defined missing values will become legitimate SAS data values may lead to highly misleading statistical results.

The authors of SPSSXSAS, Grant Blank and Andrew A. Norton, deserve a lot of credit for their work, which was done without the assistance of either SPSS, Inc. or the SAS Institute. They have tested SPSSXSAS extensively and have found no problems. If you experience any difficulties, please contact Advising Services at 978-HELP for assistance.

*Diane Mitchell*

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## Using the 8700 Laser Printer from APL

The July/August issue of *COMPUTER-NEWS* contained several articles announcing and describing the new 8700 laser printer. This article will focus on the use of this printer for printing output from UTCS SHARP APL.

The APL function "HSP", found in the APL workspace "1 HSPRINT" is used to submit a request for highspeed printing from APL. During the user test of the laser printer, from August 29 to September 16, you may specify the laser printer by coding DEST=X8700 in the HSPRINT request. As of September 17 the default print destination for HSP jobs will be the laser printer (DEST=CENTRAL). The default forms will be YADC: 8.5" X 11" paper printed on both sides, using a landscape layout with a 0.50" margin, and using the APL standard character set. This is an excellent layout for workspace listings and is

continued...

**APL** continued

suitable for any job you would previously have printed using a forms code of 7001 on the line printer.

One thing that you must remember when using the APL character set is that the Portrait 2-up layout is NOT available. Thus any forms code of the form xCDx is invalid and must not be used. The reasons for this are economic. An additional character set would have to be purchased to accommodate a layout of portrait 2-up. The volume of APL printing on highspeed, and the degree of usefulness of this layout to APL was simply not high enough to justify the expense.

In the following examples, a user by the name of Smith is submitting jobs to print an APL file which is tied to 2.

1. The following will print the file in portrait layout, single sided. This will be similar to a forms code of 7009 or 7018 on the line printer.

```
2 HSP ‘NBDC∘SMITH’
```

2. This example is similar to the first one, except that the pages will be printed on both sides. This will be cheaper since the cost of paper will be cut approximately in half.

```
2 HSP ‘YBDC∘SMITH’
```

3. In this example the user wishes to print job on the line printer at the central site, using the 7001 print train.

```
2 HSP ‘7001∘PRIN(DEST=IBM1403)’
```

If anybody is currently using a forms code of the form 8xxx on the line printer please contact Advising Services at 978-HELP. If there is a demand for it, we can provide a translate table which will give you an equivalent character set on the laser printer.

For complete instructions on the use of this workspace, please see the variables in the workspace, or the SHARP APL Technical Note 2 and 8 (SATN-2, SATN-8).

*Mary Ann Lawry*

# PACX Class 132 Changes

### IBM Fullscreen Service Changes

PACX Class 132 for IBM Fullscreen Service, has been renamed Class 33. The alphanumeric designation, IBMAFS, remains the same. This change will allow users of LDS 125 modems to set the thumb-wheel dial switches to obtain Class 33.

The IBM Fullscreen Service now performs autobaud speed detection. In addition to the established speed of 4800 bps, 1200 bps and 300 bps are now supported as well. This enhancement allows dial-in users access to IBM Fullscreen Services. For details, refer to the UTCS Guide to Series/I (MANUAL=SERIES), which is available online or may be consulted at the Information Office.

UTCS has also increased the number of IBM Fullscreen Service ports. The number of public ports has been more than doubled.

*Ron Vander Kraats*

## Hours of Service

The following hours of service are in effect for:

| **The Papal Visit** | **Friday, September 14, 1984** |
|---|---|
| 3033/N12 GPJS(Classes B,E), Calcomp | closed |
| 3033/N12 GPJS(Class A), WYLBUR, APL, TSO | unattended |
| DEC1090, 11/70 | unattended |
| BICS | unattended |

Normal hours of service for all systems will resume Saturday, September 15, 1984.

### Thanksgiving Day

| | **October 6 (Saturday)** | **October 7 (Sunday)** | **October 8 (Monday)** |
|---|---|---|---|
| 3033/N12 GPJS(Classes B,E), Calcomp | 10:00-18:00 | 10:00-18:00 | closed |
| 3033/N12 GPJS(Class A), WYLBUR, APL, TSO | 10:00-18:00* | 10:00-18:00* | unattended |
| DEC1090, 11/70 | 10:00-18:00* | unattended | unattended |
| BICS | unattended | unattended | unattended |

* Running unattended outside these hours.
Normal hours of service for all systems will resume Tuesday, October 9, 1984.

In the event of any changes to the above schedules, a notice will appear in HOTNEWS one week prior to the holiday.

## Terminal Rentals

Several types of video and hardcopy terminals, with accompanying acoustic modems, are available for rental to UTCS users. For details on terminals and rates, or to arrange a rental, please contact the Service Support Coordinator at 978-3787.

*Theresa Kusy*

# UTCS Noncredit Short Courses

The following noncredit short courses are scheduled in September and October. These courses deal with the various products and services supported by UTCS. Complete course descriptions for these and other noncredit short courses offered at UTCS are available at the Information Office, Engineering Annex, Room 206 and at the Accounting Services Office, McLennan Labs, Room 337.

All short courses are held in the UTCS Education Facility, Room 221, McLennan Physical Laboratories. Due to the limited seating capacity in the Education Facility, and the number of terminals available for our hands-on courses, registration is required for short courses.

Please note that we reserve the right to cancel courses, if registration is too low.

Anyone interested in taking any of these courses must register in person with:

Educational Services Support Specialist
Engineering Annex, Room 207
978-4565

A $10 nonrefundable Administration Fee per course payable by cash, cheque, or on a Customer Account Number (CAN), is due at the time of registration.

*(Anyone interested in credit courses should contact the Dept. of Computer Science at 978-6360).*

**DEC101 - DECsystem-10 for Novices**

Date: October 11, 1984
Time: 9:30-3:00 p.m.

**DDS101 - Introduction to IBM Disk Datasets**

Date: October 12, 1984
Time: 10:00-12:00 noon

**JCL101 - JCL for Beginners**

Date: October 1-5, 1984
Time: 11:00-12:00 noon

**SAS101 - Introduction to SAS**

Prerequisite: DDS101, WYL101

Date: September 24-28, 1984
Time: 2:00-4:00 p.m.

**SAS201 - Intermediate SAS**

Date: October 15-19, 1984
Time: 2:00-3:00 p.m.

**SOS/SCR101 - Introduction to SOS/SCRIBE**

Date: September 17-21, 1984
Time: 9:30-12:30 p.m.

**WYL101 - Introduction to WYLBUR**

Prerequisite: DDS101

Date: October 15-17, 1984
Time: 10:00-12:00 noon (Oct. 15-16)
10:00-1:00 (Oct. 17)

**SCR102 - Scribe for Beginners**

Date: Sept. 25-26, 1984
Time: 9:30-12:30 p.m.

*Irene Rosiecki*

# Change Committee

**Changes to the IBM 3033/N12**

1. MSGCLASS in WYLIST was changed to MSGCLASS=Z on June 20. This change will prevent users from having their JCL printed out every time they produce a job listing.
2. The maximum Class A region was increased to 1500K on June 17.
3. The master catalogue was converted to ICF on July 2.
4. As of July 3, charging of special forms output is no longer based on a line count. All charging is now based on a page count, regardless of the number of lines on a page.
5. Release 4.0 of PL/I was installed for production on July 4.
6. It has been decided that if a special form has been submitted with an inappropriate left margin, the operators will no longer take it upon themselves to realign the printer. All jobs will be printed according to the requested specifications.
7. Release 2.9 of SPSS-X was installed as the default version on July 9.
8. A Series/1 "D" was moved to the IBM 3033/N12 machine to increase fullscreen access to MVS.

**Changes to the IBM 4341**

1. A 3380 B04 disk storage unit was added to the 4341 on June 18.
2. SAS 82.4 was installed on this machine on August 2.
3. IMS 1.2 was installed for production of August 3.

**Changes to the DECsystem-10**

1. Version 7.02 of TOPS-10, was installed on July 24 and will provide new features.

**Changes to Other Systems and Services**

1. The FinalWord is fully supported as a Class A product as of June 28.
2. Alphanumeric characters have been added to the FTS service making it consistent with PACX classes.
3. The hardware for the Alumni Affairs VAX-11/ 750 was installed on July 11.
4. Installation of a VAX-11/750, DASD, and a 6250 BPI drive was completed on July 26. This will provide improved CDF facilities.
5. Installation of a fibre optic cable linking the Engineering Annex, McLennan Labs, and the Sidney Smith buildings was completed on July 20 as part of the St. George campus networking system.
6. DOCWS was removed from the APL Public Library 4 on July 4.
7. The May 1983 Release of SHARP APL was installed on August 6.

*Joan Coutts*

# New UTCS Documents

**New UTCS Documents in hardcopy**

UTCS Guide to Census Tapes
UTCS Guide to GP UNIX
UTCS Guide to Highspeed Printing

Previously announced:

The SOS Workbook
UTCS Catalogue: Access, Part 1
UTCS Catalogue: Access, Part 2
UTCS Catalogue: Numerical Products
UTCS Catalogue: Storage
UTCS Catalogue: Text Products
UTCS Guide to File Transfer Service

continued...

**New UTCS Documents** continued

UTCS Guide to KERMIT
UTCS Guide to Mainframe File Transfer Facility
UTCS Guide to SCRIBE

**New UTCS Guides online**

UTCS Guide to Highspeed Printing
without fonts (MANUAL=PRINT)
(on DECsystem-10, TY DOC:PRINT,DOC)

Previously announced:

UTCS Guide to APL (MANUAL=APLGD)
UTCS Guide to APL XFR (MANUAL=APLXFR)
UTCS Guide to File Transfer Service
(MANUAL=FTS)
UTCS Guide to GPJS (MANUAL=GPJSX)
UTCS Guide to IBM MVS Online Storage
(MANUAL=IBMDISK)
UTCS Guide to KERMIT
(MANUAL=KERMIT)
UTCS Guide to Mainframe File Transfer Facility
(MANUAL=MFTF)
UTCS Guide to Paper Tapes
(MANUAL=PAPTAPE)
UTCS Guide to SCRIBE
(on DECsystem-10 only; TY DOC:SCRIBE.DOC.
For printing instructions, see page 1 of document.)
UTCS Guide to Series/1 Terminal Use
(MANUAL=SERIES)
3270 Emulation:
UTCS Guide to
Cybernex APL100 and Volker Craig VC404
(MANUAL=CYBER)
DM1520 (MANUAL=DM1520)
Hardcopy Terminal (MANUAL=HARDCOPY)
IBM 3101 (MANUAL=IBM3101)
SOROC IQ (MANUAL=SOROC)
VT52 (MANUAL=VT52)
VT100 (MANUAL=VT100)
UTCS Guide to TFW.MAK in SCRIBE
(on DECsystem-10 only; TY DOC:TFW.DOC)
UTCS Guide to WYLBUR (MANUAL=WYLINTRO)

To print online documents, WYLBUR users type “do document?”, TSO users type “help document”, APL users type “)LOAD 1 UTCSGUIDE <CR> HELP”.

## Personnel Changes

**Vera Petrashkewych** has joined the UTCS Imaging/Humanities Support Group.

**Geoffrey Chun** is now working in the Communications and Technical Support Group.

**Paul Shindman** has joined the User Interface Group to take on the responsibility of APL Product Specialist.

**Jonathan Alexander,** a Waterloo Coop student has returned to Advising to complete his final work term. He will be starting with Advising Services as a full-time consultant in January.

*Elizabeth Weitmann*

## Recent Acquisitions in the Computer Library

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**Computer Library** continued

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Hamacher, V. Carl et al.
Computer organization. 2d ed.
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**University of Illinois**

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Dollas, A. - Spectrum Sample Transmission: a new concept in wavelength division multiplexing. May 1984, 94 p. (84-1172)

**Rutgers University**

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Kastner, J.K. - Strategies for expert consultation in therapy planning. Oct. 1983. (CBM-136)

**University of Southern California**

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**Wayne State University**

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| External Marketing Consultant | Ihor Prociuk | MP350 | 6875 |
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| Central Advising Office (Appointments) | HELP | 300 Baud Interactive Services | 6200 |
| Central Advising Office (Phone-in) | HELP | 1200 Baud Interactive Services | 3959 |
| Microcomputer Support Group | 5071 | DATAPAC | 4320, 0056 |
| System Status Enquiries (DEC) | 4318 | Telenet | 0302043200056 |
| System Status Enquiries (IBM) | 7393 | Tymnet | <backspace> DPAC;302043200056 |

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**Names and Locations**

- **Central Advising Office (CAO), 978-HELP**
- **Education Facility (Educ),** McLennan Labs, 60 St. George St., Room 221
- **Engineering Annex (EAT, CDF),** 11 King's College Road, Rooms 103, 104, 107, 201, 203.
- **Erindale College (Erin), 828-5339,** Mississauga Road, Erindale Campus, Rooms 2005, 2039, 2045
- **Robarts,** Robarts Library, 130 St. George St., Room 1061A
- **Scarborough College (Scar), 284-3122,** Military Trail, Scarborough Campus, Room S624, S625, S627, S628, S628A
- **Sidney Smith (AST & ASUT),** 100 St. George St., Rooms 1071, 1073, 2105
- **St.Michael's College,** 121 St. Joseph St., Room 101
- **Trinity College,** 6 Hoskins Ave., Room 024
- **Victoria University,** 73 Queens Park Cres., Room 012.

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| Robarts | 8:30-23:00 | 8:30-18:00 | 9:00-17:00 | closed | BICS | No |
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* Research includes graduates, faculty, staff. ** May be unavailable due to UTCS courses.
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**Services Available**
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| | **BICS** | **Keypunch** | **PACX** | **Printers** | **UNIX** | **Ethernet** |
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| Educ | N | N | Y | N | N | N |
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# UTCS Systems

**3033/N12 Processor**

- located in McLennan Physical Laboratories
- provides General Purpose Job Stream, TSO, WYLBUR, APL
- 12 megabytes of memory
- MVS with JES2

**3033/U16 Processor**

- located in McLennan Physical Laboratories
- provides instructional access using BICS
- 16 megabytes of memory
- UTS (modified UNIX Seventh Edition) under VM/370

**4341 Mod II Processor**

- located in McLennan Physical Laboratories
- provides administrative IMS/VS, DB/DC, Batch and TSO
- 16 megabytes of memory
- MVS with JES2

**DECsystem-10 Model 1090**

- located in McLennan Physical Laboratories
- provides General Purpose Time-Sharing
- 512 K - 36 bit words of memory
- TOPS-10 operating system, version 7.02
- GALAXY queuing, spooling, and Batch subsystem, Version 4.1

**PDP-11/70 SAS UNIX**

- located in McLennan Physical Laboratories
- provides UNIX Statistical Analysis Service (Dept. of Statistics only)
- 4 megabytes of memory
- typesetting hardware: Varian for previewing typeset output
- UNIX Seventh Edition

**"Hub VAX" (11/750)**

- located in McLennan Physical Laboratories
- provides backup, program testing, and intercommunication relating to student services
- 3 megabytes of memory
- VMS

**GP UNIX**

- located in McLennan Physical Laboratories
- provides General Purpose Timesharing
- UNIX (4.2BSD, VAX-11/750)
- typesetting hardware (CAT/8), and (Varian) for previewing output

**Computer Disciplines Facility**

VAX-11/750 (4 megabytes of memory)
VAX-11/750 (2 megabytes of memory)
VAX-11/780 (4 megabytes of memory)

- located in Engineering Annex
- provide Computer Science interactive access
- UNIX (Berkeley Unix 4.2BSD)

**Communications & Technical Support**

- located in Sandford Fleming Building, Fourth Floor
- Communications Group provides communications systems, terminals, modems, data channels: consulting and installation.
- Field Service Group installs and maintains small computer systems on a contract basis or on a cost-per-call basis.
- provides consulting on minicomputers; configures and installs minicomputer systems

**Microcomputer Facility**

- located in McLennan Physical Laboratories
- provides consulting on microcomputer systems
- offers media conversion services
- Machines include:
  IBM Personal Computer & PC/XT, APPLE II Plus,
  Macintosh, TRS-80 Model 1, S-100 CP/M System,
  Osborne 1, Hyperion, Eagle Spirit,
  plus a variety of others on loan from suppliers

**Scarborough College Systems**

VAX-11/750 (5 megabytes of memory)
VAX-11/750 (2 megabytes of memory)

- provides instructional access using UNIX (Berkeley Unix 4.2BSD)

**Erindale College Systems**

VAX-11/780 (4 megabytes of memory)

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- Research access

VAX-11/750 (5 megabytes of memory)

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